

**Notice of Allowability**

Application No.

09/871,524

Applicant(s)

CASE, ELIOT M.

Examiner

Art Unit

James S. Wozniak

2626

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the appeal brief filed on 5/1/2006.
2. ☒ The allowed claim(s) is/are 1-3, 6-7, 11-13, and 16-17 (now claims 1-10).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

## **DETAILED ACTION**

### ***Response to Arguments***

1. In response to the advisory action from 9/30/2005, the applicant has submitted an appeal brief, filed 5/1/2006, arguing to traverse the art rejection based on the limitation regarding the text-to-speech training approach utilizing an ongoing natural language dialog between a computer system having a list of ways to ask questions with a variable for the questionable data and a human teacher (*Appeal Brief, Pages 6-8*). In response to the applicant's arguments and for the reasons given below, claims 1-3, 6-7, 11-13, and 16-17 are allowable over the prior art of record.

### ***Allowable Subject Matter***

2. **Claims 1-3, 6-7, 11-13, and 16-17** are allowable over the prior art of record.

3. The following is an examiner's statement of reasons for allowance:

With respect to **Claims 1 and 11**, the prior art of record fails to explicitly teach or fairly suggest, either singly or in combination, a method or computer program stored on a computer readable medium for training a text-to-speech (TTS) computer system via a human voice input from a human teacher comprising: receiving a text spelling of a unknown word at the computer, requesting that a human teacher provides a voice pronunciation of the unknown word in the form

of a natural language dialog wherein the computer has a list of different ways to ask questions based on information content level with a variable for questionable data (*specification, pages 6-7*), receiving the human voice pronunciation of the unknown word, determining the phoneme spelling sequence of the unknown word using a speech recognition engine, and associating the text spelling of the unknown word with the phonetic spelling to enable the TTS engine to correctly pronounce the word in the future.

Although Baker et al (*U.S. Patent: 6,092,044*) discloses a TTS training method for associating a phonetic spelling with a text spelling of an unknown word (*Col. 15, Line 56- Col. 16, Line 5 and Col. 18, Lines 42-55*), Baker does not rely on any type of natural language dialog between the user and the computer to accomplish such an association. Rather, the system disclosed by Baker selects a most likely phonemic sequence candidate and does not initiate any spoken dialog with the user in order to verify such a candidate. Thus, the presently claimed invention differs from the TTS training method disclosed by Baker.

Although Beutnagel (*U.S. Patent: 6,078,885*) does provide a prompt dialog between a computer and a user for entering a pronunciation of an unknown word (*Col. 5, Lines 35-46*), Beutnagel only teaches one non-variable way of making a pronunciation request that does not rely on a list of different ways to ask questions based on information content level with a variable for questionable data. Thus, the presently claimed invention differs from the unknown word training method disclosed by Beutnagel.

While Junqua (*U.S. Patent: 6,598,018*) discloses a method for outputting inquiries to a user by processing question sentences having fixed and variable parts (*Col. 3, Lines 31-41; and Col. 4, Lines 46-67*), the computer-generated inquiries taught by Junqua, as correctly noted by the

applicant (*Appeal Brief, Pages 6-7*), are directed towards verifying vehicle navigation commands and not the pronunciation of an unknown word. Junqua also fails to suggest applying the disclosed inquiry output method to any type of TTS training application. Thus, one of ordinary skill in the art would not be motivated to combine the teachings of Junqua with that of Baker and Beutnagel, to achieve the presently claimed invention, because Junqua fails to make any suggestion regarding question generation in a TTS training application. Also, the method taught by Junqua utilizes a question frame featuring a substitutable portion for the questionable data, which is not a list of questions, as is claimed in the present invention. Thus, the method of asking questions in the present invention differs from the question generation disclosed by Junqua.

Although Contolini et al (*U.S. Patent: 6,233,553*) teaches a method for determining a phonetic description for a spelled word utilizing a decision tree containing yes/no questions (*Col. 6, Lines 33-49*), the questions disclosed by Contolini are merely used for automatically determining a most likely path through a decision tree and are not utilized in a natural language dialog with a user for determining a phonetic description. Also, Contolini fails to make any mention of a list of different ways to ask questions based on information content level with a variable for questionable data. Thus, the presently claimed invention differs from the pronunciation training method disclosed by Contolini.

Dependent **claims 2-3, 6-7 12-13, and 16-17** further limit allowable independent claims, and thus, are also allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


*Conclusion*

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached at (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James S. Wozniak  
6/1/2006

  
DAVID HUDSPETH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600